

including the aforementioned sidewalls (labeled in FIG. 1) of the receptacle 102. Further, the compartment 124, which includes the power supply 122, is located on a surface 134b of the cover 104, with the surface 134b being opposite the surface 134a (shown in FIG. 1).

[0045] The accessory device 100 shown and described in FIGS. 1 and 2 provides several advantages. For example, when the accessory device 100 is in the open position shown in FIG. 1, the power supply 122 is laterally displaced relative to an electronic device in the receptacle 102. As a result, interference caused by the power supply 122 (in the form of signal blocking or radio frequency interference) is minimized or prevented. In other words, an electronic device positioned in the receptacle 102 may transmit wireless communication through the wall 108 without interference issues caused by the power supply 122. Also, due to the cover 104 carrying the power supply 122 (as opposed to the receptacle 102), the power supply 122 can span a substantial region of the surface 134b of the cover 104, as the size of the power supply 122 is not limited due to any openings or other features that accommodate the electronic device. As a result, the size of the power supply 122, and associated amount of energy storage, may be greater than power supplies integrated with traditional accessory devices, as the space provided by the surface 134b generally includes no other features to accommodate the electronic device. Also, some electronic devices include wireless charging capabilities. For example, an electronic device may include an inductive charging receiver coil capable of receiving energy transfer through magnetic induction. With the power supply 122 located on the cover 104, as opposed to the wall 108, the accessory device 100 provides minimal, if any, interference with the inductive energy transfer through the wall 108.

[0046] Further, in the closed position shown in FIG. 2, the power supply 122 and the compartment 124 provide protection, in addition to the cover 104, for a transparent protective layer (not shown in FIG. 2), or cover glass, of an electronic device. Accordingly, multiple structural components can cover the transparent protective layer, thereby increasing the amount of protection provided to the transparent protective layer. Also, in the closed position, while the power supply 122 is relatively closer to an electronic device positioned in the receptacle 102, the electronic device is generally surrounded (and subsequently protected) by both the receptacle 102 and the cover 104, and thus, is not in use by a user. As a result, wireless communication issues related to potential interference caused by the power supply 122 in the closed position are generally inconsequential.

[0047] FIG. 3 illustrates a front isometric view of an embodiment of an electronic device 170, in accordance with some described embodiments. The electronic device 170 may include a portable electronic device, such as a mobile wireless communication device or a tablet computing device. The electronic device 170 is suitable for use with the accessory device 100 (shown in FIGS. 1 and 2), as well as other accessory devices described herein. The electronic device 170 may include an enclosure 172, or housing, that stores several components of the electronic device 170, such as processing circuitry, memory circuitry, a battery, a speaker, a microphone, and flexible circuitry and cables that electrically connect the aforementioned components to each other. The enclosure 172 may include a wall (not shown in FIG. 3) and several sidewalls, such as a sidewall 174a and a sidewall 174b. In some embodiments, the sidewalls

include a metal, such as stainless steel (as a non-limiting example), and the wall includes a non-metal, such as glass. The size and shape of the receptacle 102 (shown in FIG. 1) of the accessory device 100 corresponds to the size and shape of the enclosure 172.

[0048] The electronic device 170 may include a display 176 (shown as a dotted line) designed to present visual information in the form of still images, motion images, and/or textual information. The electronic device 170 may further include a transparent layer 178 that covers the display 176. The display 176 may include a display layer that presents the visual information. The display 176 further includes a touch input layer that allows a user to touch the transparent layer 178 and provide a touch input representing a command received by components of the electronic device 170. The transparent layer 178 may provide a protective cover for the display 176, and may include a material such as glass, sapphire, plastic, or the like.

[0049] The electronic device 170 may further include a button 182 that can be actuated by a user to provide a touch input to the electronic device 170. When the electronic device 170 is positioned in the receptacle 102 (shown in FIG. 1), the button 118 (shown in FIG. 1) of the accessory device 100 is aligned with the button 182. The electronic device 170 may further include a data port 184 that can electrically and mechanically connect to a connector of a cable assembly (not shown in FIG. 3). In this manner, the electronic device 170 may use the data port 184 to receive power, as well as send and receive data to and from, respectively, the cable assembly when the cable assembly is coupled to an external electronic device (not shown in FIG. 3). Also, the electronic device 170 may further include openings 185a and openings 185b formed in the sidewall 174b. The openings 185a and openings 185b provide an unobstructed pathway for acoustical components (not shown in FIG. 3) of the electronic device 170, such as microphones and speaker modules.

[0050] FIG. 4 illustrates a rear isometric view of the electronic device 170 shown in FIG. 4, showing additional features of the electronic device 170. For example, the electronic device 170 includes a power supply 186 designed to store and provide energy to components (of the electronic device 170). The electronic device 170 further includes a wall 188 that combines with the aforementioned sidewalls to define the enclosure 172. The wall 188 may include non-metals, as described above. In this regard, the electronic device 170 may include an inductive charging module 192 that includes an inductive charging receiver coil designed to receive energy (through electromagnetic or magnetic induction) that is used to charge the power supply 186. As a non-metal, the wall 188 provides minimal, if any, impedance of energy transmitted by an inductive charging station (not shown in FIG. 4) to the inductive charging module 192. The electronic device 170 may further include a camera module 194 designed to capture images of an object or objects external to the electronic device 170. The electronic device 170 may further include a flash module 196 designed to provide additional light to the object(s) during an image capturing event by the camera module 194. Also, the electronic device 170 may include contacts 197 designed to electrically couple with contacts of an accessory device 100 (such as the contacts 128 shown in FIG. 1). The contacts 197 support data transmission and power to internal components of the electronic device 170.